

On the genus AMBLYOPINUS, and description of a new species from Tasmania ; by the Rev. A. MATTHEWS, M.A.

The genus *Amblyopinus* was instituted by M. Solsky in 1875*, to receive two species of *Brachelytra*, which had been found in South America, in the condition of pseudo-parasites upon certain species of Field Mice. In form as well as in their habits these animals were somewhat anomalous, and it was not without hesitation, that M. Solsky placed them among the *Tachyporidæ*.

In the summer of 1877, Mr. Janson received a collection of Coleoptera from Mr. Simson, of Gould's Country, Tasmania, among which he noticed two specimens of a strange looking *Brachelytron*, and on reference to the list of localities found that they had been taken from the fur of a living Rat. This unusual habitat brought M. Solsky's Memoir to his recollection, and he very kindly forwarded the insects to me for dissection, sending at the same time the whole of M. Solsky's descriptions, transcribed verbatim from the original publication.

Since then I have dissected one of these insects, with great care, and have made complete preparations of every part of their external anatomy. I have also carefully compared each part with fresh dissections of the analagous organs of the *Tachyporidæ* and the *Staphylinidæ*, and will now proceed to detail the result of my observations.

It is first of all necessary to presume that the insect which I am about to describe is a true species of *Amblyopinus*, but on this point, although I have never seen any of the specimens found by M. Solsky, I have very little doubt, his figures and descriptions are so full and clear, that I think their generic identity is obvious.

But if this is the fact, I cannot coincide with M. Solsky in placing *Amblyopinus* among the *Tachyporidæ*; the only

* *Hore Societatis Entomologicæ Rossicæ*, T. xi, p. 10.

character in which *Amblyopinus* agrees exclusively with the *Tachyporidæ* consists in the laminate extension of the frontal covering of the head, or what might have been termed the clypeus, if that part had been defined. I do not think that this one point of resemblance is sufficient to counterbalance the discrepancies which exist in many characters of much greater differential importance. In the *Tachyporidæ* the intermediate coxæ are comparatively small and rather deeply and abruptly imbedded in the meso-sternum, which is not in any way depressed for their accommodation. In *Amblyopinus* the meso- and meta-sterna are of a totally different type, and the former of these parts is deeply depressed for nearly the whole of its length and breadth to receive the very large intermediate coxæ, which are entirely free; a form precisely similar to that exhibited by *Philonthus* and *Quediüs*. The mandibles, though of a very peculiar shape, are long, much curved, and armed with long and very strong teeth, as in many *Philonthi*; while on the other hand the mandibles of the *Tachyporidæ* are for the most part short, robust and simple. From *Quediüs*, to which in many respects it bears a strong resemblance, *Amblyopinus* differs materially in the *Episterna* of the prothorax; in the former these parts are excessively enlarged and produced triangularly until they almost meet behind the anterior coxæ, covering, as pointed out by Dr. Erichson, the prothoracic stigmata; in the latter the *Episterna* are small and linear, indeed, scarcely observable, and the prothoracic stigmata are open and uncovered, and large as in *Philonthus*; this important character, together with the general diversity of form, will be sufficient to separate *Amblyopinus* from *Quediüs*, although in many anatomical details these genera are almost identical.

It will be observed that in the preceding paragraph I have called the triangular plates, which in *Quediüs* and some other genera extend over the prothoracic stigmata, the *Episterna*, and I think that I am justified in using that term, by dissections which I have made of the prothorax; these immersed in Canada Balsam exhibit, as in diagram 8, a suture proceeding from the anterior extremity of the prosternum, in a line somewhat sub-parallel with the margin of the pronotum to within a short distance from its base. A faint suture is also visible at the base

of the triangular portion, which may therefore constitute the true *Epimeron*. And if these processes were produced until they met behind the anterior coxæ, which in some species they very nearly do, they would then completely enclose the coxæ, and present a form entirely analogous to the prothoracic episterna and epimera of *Trichopteryx*. This anatomical definition is also more likely to be correct on account of the high development of the *Brachelytra* as a class, which will hardly permit the universal disappearance of any important portion of the anatomical structure of the true Coleopterous type.

It appears to me that *Amblyopinus* is much more closely allied to *Philonthus* than to any other genus; indeed, the only anatomical difference between them consists in the prolongation of the frontal plate, and in the peculiarly placed and almost rudimentary eye of the former, I might also add, in the deflexed angles of the pronotum. But for these differences I should at once have concluded that at least the present species had been a true *Philonthus*. All this, however, may not affect the species described by M. Solsky.

If the insect which I have examined be a true *Amblyopinus*, I should place that genus among the "*Staphylini genuini*," of Dr. Erichson, and in close proximity to *Philonthus*. When we consider the intimate anatomical affinity between *Philonthus* and *Quedius*, it seems unnatural to separate those genera by the interval occupied in some lists by *Staphylinus* and its immediate allies, and that the arrangement would be improved by placing *Amblyopinus* as the connecting link between them. In the present species we find the form and outline of a true *Philonthus*, combined with the distinctive characters of *Amblyopinus*.

I have thus noticed the principal points in which *Amblyopinus* either differs from or agrees with the various genera to which it seems to bear any affinity; and having done this, will not enter upon a detailed description of each separate part.

By the figures and diagrams in the accompanying plate it will be seen that the organs of the mouth are almost identical with the corresponding parts of both *Quedius* and *Philonthus*; the same similarity also prevails throughout the whole anatomy,

except those points which I have already noticed, and all these parts have been described with great accuracy by Dr. Erichson in his "*Genera et Species Staphylinorum*." But I think it would be better to consider the parts, which in his description of the complex organ termed "the labium," Dr. Erichson distinguishes by the names "segmentum primum" and "segmentum innominatum," as together forming the true mentum, in fact a mentum duplex, a very common form throughout the whole class; a strictly analogous formation also exists in the labrum of *Amblyopinus*, vid. f. 2, and other genera of *Brachelytra*.

The discrepancies which exist between my figures of some of the organs of the mouth, and those given by M. Solsky, I do not consider of material importance, for it is utterly impossible to discern the true outline of any of these parts unless the preparation is immersed in Canada Balsam.

AMBLYOPINUS, *Solsky*.

Amblyopinus Jansonii, n. sp., Pl. VI.

L.c. $2\frac{1}{2}$ –3 lin. = 5–6 mm. Rufo-testaceus longe setosus, capite atque pronoto magnis nitidissimis; elytris perbrevis rugose punctatis; abdomine sat longo medium versus latiori rugose punctato; pedibus atque antennis modicis, illis robustis.

Caput magnum nitidissimum, rugis perlevibus sinuatis confertissime dispositis per totum eleganter notatum, punctis duobus magnis et profundis supra oculum, duobus minoribus ad angulum posteriorem, quatuor exiguis curvatim dispositis in disco utrinque, atque quatuor equidistantibus, exterioribus permagnis, ad basim impressum, Oculi minuti ovales glabri lenticulis nullis instructi in recessu profundo sub laminae frontalis margine laterali siti. Antennae modicae articulo tertio secundo longiori.

Pronotum sat magnum sub-ovale capite fere pariter longum et latum nitidissimum, rugis perlevibus sinuatis confertissime dispositis per totum eleganter notatum, levissime et remote punctatum, punctis duobus parvis ad mediam marginem anteriorem, tribus ad angulum utrumque anteriorem deflexum, atque singulo ad angulum utrumque posteriorem impressum, marginibus lateralibus atque basali leviter reflexis. E punctis hisce omnibus et capitis et pronoti setae erectae plerumque longae et validae exoriuntur.

Scutellum sat magnum, sat deplanatum ad apicem rotundatum, rugis transversis impressum.

Alæ nullæ.

Elytra perbrevia, pronoto et breviora et angustiora rugose punctata nitida pilis sat longis atque validis vestita, setâ longâ validâ erectâ ad humerum utrumque instructa, apicibus oblique truncatis atque setis validis fimbriatis.

Abdomen elongatum pone medium latissimum, segmentis septem compositum, sex primis rugose punctatis atque pilis longis robustis, extremis multo longioribus, dense vestitis, segmentis 2-6 setis erectis longis validis aut duabus aut tribus equidistantibus utrinque instructis, lateribus profunde marginatis, segmento apicali sat obtuso simplici, levius punctato et pilis brevioribus vestito; segmentis ventralibus sex profunde punctatis atque pilis densis vestitis, margine posteriori segmentorum 4 et 5 setis quatuor erectis instructâ, stylis analibus quatuor sat magnis setis longis instructis.

Pedes modici robusti, tibiis quatuor posterioribus calcaribus longis et validis armatis, tarsis anticis dilatatis, intermediis articulo basali valde elongato et incrassato sub-cylindrico, subtus sulco longitudinali profundo impresso margine exteriori fortiter pectinatâ, interiori setis instructâ, articulis 2-3-4 profunde bilobatis atque setis longis marginatis.

Differt a speciebus adhuc descriptis formâ *Philonthoideâ*, et corpore setoso punctis multis foveolatis impresso.

Habitat Tasmaniam sub pelle Muris Ratti detectus.

EXPLANATION OF PLATE VI.

Fig. 1. *Amblyopinus Jansoni*.

„ 2. Labrum.

„ 3. Mentum, Labium, Lingua and Labial Palpi.

„ 4. Mandibles.

„ 5. Maxilla and Maxillary Palpi.

„ 6. Head in profile to shew the eye.

„ 7. Intermediate Leg.

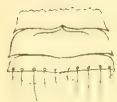
„ 8. Longitudinal section of the Pronotum of *Quechus* shewing the probable Episternon and Epimeron, (*aa*).



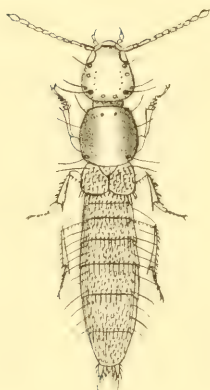
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